

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandria, Viginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/916,536	07/27/2001	Kevin Y. Chou	SP01-209	8547
22928	7590 06/09/2003	•		
CORNING INCORPORATED			EXAMINER	
SP-TI-3-1 CORNING, NY 14831			SERGENT, RABON A	
			ART UNIT	PAPER NUMBER
		ì	1711	1/7
•			DATE MAILED: 06/09/2003	$\mathcal{L} = \mathcal{L} \mathcal{D}$

Please find below and/or attached an Office communication concerning this application or proceeding.

•		·		mK 40
•		Application No.	Applicant(s)	
		09/916,536	CHOU ET AL.	
Office Action Summary		Examiner	Art Unit	
		Rabon Sergent	1711	
Period fo	The MAILING DATE of this communication a	ppears on the cover sheet w	ith the correspondence ac	ldress
	ORTENED STATUTORY PERIOD FOR REP	DIVIS SET TO EVDIDE 2 M	IONŤU(S) ÉDOM	
THE N - Exter after - If the - If NO - Failui - Any r	MAILING DATE OF THIS COMMUNICATION sicions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a re period for reply is specified above, the maximum statutory perio e to reply within the set or extended period for reply will, by state eply received by the Office later than three months after the mail d patent term adjustment. See 37 CFR 1.704(b).	1.  1.136(a). In no event, however, may a sply within the statutory minimum of third will apply and will expire SIX (6) MOI ute, cause the application to become Al	reply be timely filed ty (30) days will be considered timel NTHS from the mailing date of this c BANDONED (35 U.S.C. § 133).	
1)⊠	Responsive to communication(s) filed on 01	1 Anril 2003		,
2a)□		This action is non-final.		
3)□	Since this application is in condition for allow	• • • • • • • • • • • • • • • • • • • •	itters prosecution as to th	na marite is
,	closed in accordance with the practice unde on of Claims			ic.ments is
4)🛛	Claim(s) 1-46 is/are pending in the application	on.		
	4a) Of the above claim(s) is/are withdr	awn from consideration.	•	
5)[	Claim(s) is/are allowed.	e e		
6)⊠	Claim(s) <u>1-46</u> is/are rejected.			
7)	Claim(s) is/are objected to.	······································	s	
8)[	Claim(s) are subject to restriction and	or election requirement.		
Applicati	on Papers			
9) 🗌 🗂	The specification is objected to by the Examir	ner.		•
10) 🔲 🗆	he drawing(s) filed on is/are: a)□ acc	cepted or b) objected to by	the Examiner.	
	Applicant may not request that any objection to	the drawing(s) be held in abey	ance. See 37 CFR 1.85(a).	
11) 🔲 🗆	he proposed drawing correction filed on		disapproved by the Examin	er.
_	If approved, corrected drawings are required in	• •		
	The oath or declaration is objected to by the E	Examiner.		·
Priority u	nder 35 U.S.C. §§ 119 and 120		,	
13)	Acknowledgment is made of a claim for forei	gn priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a)[	☐ All b) ☐ Some * c) ☐ None of:			•
	1. Certified copies of the priority docume	nts have been received.		
	2. Certified copies of the priority docume	nts have been received in A	Application No	•
	3. Copies of the certified copies of the pri application from the International E ee the attached detailed Office action for a lis	Bureau (PCT Rule 17.2(a)).		Stage
14) 🗌 A	cknowledgment is made of a claim for domes	stic priority under 35 U.S.C.	§ 119(e) (to a provisiona	I application).
	□ The translation of the foreign language p	•		,
	cknowledgment is made of a claim for dome	• •		- 4
Attachment	(s)			
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of	Summary (PTO-413) Paper No Informal Patent Application (PT	

- 1. The election of species requirement has been withdrawn.
- 2. Claims 1-3, 7-24, and 28-46 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for compositions comprising oligomers derived from the reaction of polypropylene glycol, hydroxyethyl acrylate, and either 4,4'methylenebis(cyclohexylisocyanate) or isophorone diisocyanate, does not reasonably provide enablement for compositions wherein the oligomer is derived from virtually any polyol soft block. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Despite applicants' response, the position is maintained that applicants have not provided any guidance for the selection and use of components, other than the aforementioned ones, that will yield a coating composition having the claimed properties. Furthermore, the position is maintained that one of ordinary skill could not practice the claimed invention using components, other than those disclosed by the applicants, without having to resort to undue experimentation. In response, applicants have argued that the skilled artisan can rely on the examples of the specification as a guide for substituting oligomers having other soft polyol blocks with only a routine amount of experimentation. However, applicants have provided no evidence to support their argument that the skilled artisan can rely upon teachings pertaining to oligomers based on polypropylene glycol, hydroxyethyl acrylate, and either 4,4'methylenebis(cyclohexylisocyanate) or isophorone diisocyanate as a guide to produce totally unrelated oligomeric species, such as polyesters, polycarbonates, or polysiloxanes, having the

Application/Control Number: 09/916,536 Page 3

Art Unit: 1711

necessary properties, without having to resort to undue experimentation. As far as the examiner can determine, the specification sets forth no teachings that would guide one in the production of suitable oligomers that are derived from monomers other than the aforementioned ones; without such guidance, one cannot substitute radically different reactants and expect to obtain oligomers having the claimed physical properties.

3. Claim 46 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Markush group of oligomers is improper, because "and" prior to "combinations thereof" should be "or.

4. Claims 12 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The subject matter of the claims fails to further limit claims 1 and 22, because it is unclear that the species, "propylene oxide ethoxylated oxides", is unsaturated. Furthermore, it is questioned if this species has been claimed correctly.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A-person shall-be-entitled to a patent unless -

<sup>(</sup>a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 7, 12-15, 18, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Chawla ('023).

Patentee discloses radiation curable coatings, having tensile strength and modulus characteristics corresponding to those claimed, comprising the reaction product of an oligomer and unsaturated monomer which-meet applicants' reactants. See Comparative Examples A and

7. Claims 1-3, 7, 13-15, 18-24, 28, 34-36, and 39-42 are rejected under 35 U.S.C. 102(a) as being anticipated by EP 1046619.

The reference discloses a coated optical fiber, wherein the fiber is coated with a radiation curable composition, having tensile strength and modulus characteristics corresponding to those claimed, comprising the reaction product of an oligomer and unsaturated monomer which meet applicants' reactants. See abstract and examples.

8. Claims 1, 2, 7, 13-18, 20-23, 28, 34-40, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/08975.

The reference discloses a coated optical fiber, wherein the fiber is coated with a radiation curable composition, having tensile strength and modulus characteristics corresponding to those claimed, comprising the reaction product of an oligomer and unsaturated monomer which meet applicants' reactants. See abstract and examples.

9. Claims 1-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/08975.

WO 99/08975 discloses a coated optical fiber, wherein the fiber is coated with a radiation curable composition, having tensile strength and modulus characteristics corresponding to those claimed, comprising the reaction product of an unsaturated oligomer, produced by reacting a polyol, a polyisocyanate, and a hydroxy functional ethylenically unsaturated compound; and an unsaturated monomer. The reference further discloses that the oligomers-have a preferred molecular weight of 5,000 to 20,000.

10. In view of the teachings within the reference pertaining to the use of reactants which correspond to the reactants utilized by applicants and in view of the fact that the reference discloses that the oligomer should have a preferred molecular weight of at least 5,000 and that the cured coatings have physical properties that are beneficial for the protection of optical fibers, the position is taken that it would have been obvious to one of ordinary skill in the art to follow these teachings, so as to arrive at the instant invention.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

RABON SERGENT PRIMARY EXAMINER

R. Sergent June 4, 2003